



## A G E N D A

### International Vehicle Technology Symposium

March 11-13, 2003

Sacramento, California

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SPEAKER

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TOPIC

#### DAY 1

##### Session I Reducing HFCs

Moderator: Richard Corey, ARB

8:45 – 10:15 a.m.

Ward Atkinson, Sun Test Engineering

Service and Replacement of Existing Systems

James A. Baker, Delphi

Current World Activity on Mobile Air Conditioning Systems

##### Session II Aftertreatment Technology for Reducing Black Carbon, N<sub>2</sub>O and CH<sub>4</sub>

Moderator: Bart Croes, ARB

10:30 – 12:30 a.m.

Prof. Mark Jacobson, Stanford University

Global Warming Impact of Black Carbon

Matti Maricq, Ph.D., Ford

Emissions Impact of Particle Emissions

Joe Kubsh, MECA

Status of Particulate Trap Technology; and Methods To Reduce N<sub>2</sub>O Emissions

Alex Lawson, Teleflex GFI Control Systems LP

Methods to Reduce Methane Emissions

Lunch 12:30 – 2:00 p.m.

### Session III Reducing CO<sub>2</sub> Emissions

Moderator: Steve Albu, ARB

Powertrain Modifications

2:00 – 4:00 p.m.

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| Dr. Loren Beard, DaimlerChrysler | Internal Combustion Engine Improvements |
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| Prof. Marc Ross, University of Michigan | Low Cost Technologies to Reduce GHGs |
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| Dr. Peter Hofbauer, FEV | Variable Valve Timing and Variable Valve Lift |
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| Mr. Roland Kemmler, DaimlerChrysler | Cylinder Deactivation |
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Public Comment Period 4:00 – 5:00

## DAY 2

### Session III Reducing CO<sub>2</sub> Emissions, continued

Moderator: Steve Albu, ARB

Powertrain and Drivetrain Modifications

8:00 – 9:30 a.m.

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| Dr. S. M. Shahed, Garrett | Displacement Reduction with Boost; |
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| Mr. Herbert Mozer, ZF Group | Drivetrain Modifications (CVT, Toroidal CVT and 6-Speed Automatics) |
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| Mr. Mike Ruth, Cummins | Diesel Engine Technology |
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Break 9:30 – 9:45 a.m.

Powertrain and Drivetrain Modifications, continued

9:45 – 11:15 a.m.

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| Mr. Neville Jackson, Ricardo, Inc. | i-Mo-Gen; Integrated Starter/Generator Technology |
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| Mr. Jamie Turner, Lotus | Controlled Auto Ignition, Camless Engines, Variable Displacement Engines; Active Valve Train Systems |
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| Mr. Stephen Brueckner, AVL | Direct Injection Gasoline |
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Lunch 11:30 – 1:00

## Session IV Hybrid Electric and Alternative Fuel Vehicles

Moderator: Jack Kitowski, ARB

1:00 – 3:00 p.m.

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| Mr. Ben Knight, Honda               | Honda's Perspective on Hybrid Electric Vehicles |
| Mr. Dave Hermance, Toyota           | Toyota's Hybrids                                |
| Dr. Andy Frank, UC Davis            | Advanced Hybrid Technology                      |
| Dr. Sandy Thomas, H2Gen Innovations | Hydrogen Fuel Cells                             |

Break 3:00 – 3:15 p.m.

Hybrid Electric and Alternative Fuel Vehicles, continued

3:15 – 4:15 p.m.

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| Dr. Louis Browning, ICF Consulting | The Role of Alternative Fuels in Reducing Greenhouse Gases |
| Mr. Michael Jackson, TIAX          | Well to Wheel Analysis of Alternative Fuels                |

Public Comment Period 4:15 – 5:00 p.m.

## DAY 3

### Session V – Simulation of Aggregated Technologies

Moderator: Bob Cross, ARB

8:30 – 10:30 a.m.

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|----------------------------------------------|---------------------------------------------------|
| Mr. Albert Turtcher, AVL                     | Advanced Simulation Technologies                  |
| Dr. John DeCicco, Environmental Defense Fund | Systems Analysis                                  |
| Mr. Neville Jackson, Ricardo, Inc.           | Systems Analysis                                  |
| Dr. Peter Hofbauer, FEV                      | Advanced Diesel Engines for the EU And US Markets |

Public Comment Period 10:30 – 11:30 am.